

STIC Search Report

STIC Database Tracking Number: 133510

TO: Kevin Picardat Location: JEF- 5A35

Art Unit: 2822

Friday, September 24, 2004

Case Serial Number: 09/998595

From: Darcy Bates Location: EIC 2800

JEF-4B68

Phone: 571-272-2540

darcy.bates@uspto.gov

Search Notes

Re: 09/998,595 US 5,986,330

Attached are search results.

No U. S. litigation was found in searches of Lexis-Nexis and Questel-Orbit databases.

If more searching or explanation is needed, please let me know.

Thanks, Darcy Bates



PALM INTRANET

Day: Friday Date: 9/24/2004 Time: 09:29:40

Application Number Information

Application Number: 09/998595 Assignments

Examiner Number: 69603 / PICARDAT, KEVIN

Filing Date: 11/16/2001

Group Art Unit: 2822

IFW IMAGE

Effective Date: 11/16/2001

Class/Subclass: 257/644.000

Application Received: 11/19/2001

Lost Case: NO

Patent Number:

Interference Number:

Issue Date: 00/00/0000 Date of Abandonment: 00/00/0000 Unmatched Petition: NO

L&R Code: Secrecy Code:1

Secrecy Order: NO

Attorney Docket Number: 93-C-032RE(1678-42)

Third Level Review: YES Status: 30 /DOCKETED NEW CASE - READY FOR EXAMINATION

Status Date: 04/13/2004

Confirmation Number: 6201

Oral Hearing: NO

Title of Invention: ENHANCED PLANARIZATION TECHNIQUE FOR AN INTEGRATED CIRCUIT

Bar Code	PALM Location	Location Date	Charge to Loc	Charge to Name	Employee Name	Location
Appln Info	Contents Petition Info	Atty/Agent Info	nuily Data Foreign D	ata Inventors Addres		Pre Grant Pub
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	PCT / T	Search or F	PG PUBS#	Search		
	Attorney Docket	# [Search			
	Bar Code#	Search				

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PALM INTRANET Continuity Information for 09/998595

Day : Friday Date: 9/24/2004 Time: 09:29:50

Parent Data

09998595

is a reissue of <u>09007668</u>

Which is a continuation of <u>08456343</u>

Which is a continuation of <u>08163043</u>

Child Data

No Child Data

Appln Info Contents Petition Info Atty/Agent Info	Continuity Data	oreign Data Inventors	Address	Post Info
Search Another: Application# Search	or Patent# [Search		
PCT / Search	or PG PUBS#	Search		
Attorney Docket #	Search			
Bar Code # Searc	ch [

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PALM INTRANET

Day : Friday Date: 9/24/2004 Time: 09:29:55

Application Number Information

Application Number: 09/007668 Assignments

Filing Date: 01/15/1998

Effective Date: 01/15/1998

Application Received: 01/15/1998

Patent Number: <u>5986330</u> Issue Date: 11/16/1999

Date of Abandonment: 00/00/0000

Attorney Docket Number: 93-C-032C3

Status: 150 /PATENTED CASE

Examiner Number: 67774 / MEIER, STEPHEN

Group Art Unit: 2822

Class/Subclass: 257/644.000

Lost Case: NO

Interference Number:

Unmatched Petition: NO

L&R Code: Secrecy Code:1 Third Level Review: NO

Secrecy Order: NO

Status Date: 11/08/1999

Oral Hearing: NO Confirmation Number: 5251

Title of Invention: ENHANCED PLANARIZATION TECHNIQUE FOR AN INTEGRATED CIRCUIT

Bar Code	PALM Location	Location Date	Charge to Loc	Charge to Name	Employee Name	Location	
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	PCT//	Search	or PG PUBS#	Search			
	Attorney Dock	cet #	Search				
	Bar Code #	Sear	rch.				

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To go back use Back button on your browser toolbar.

Back to PALM ASSIGNMENT QASIS Home page

Day: Friday Date: 9/24/2004 PALM INTRANET Time: 09:30:02 **Continuity Information for 09/007668 Parent Data** 09007668 is a continuation of <u>08456343</u> Which is a continuation of <u>08163043</u> **Child Data** 09998595 is a reissue of 09007668 Atty/Agent Info | Continuity Data | Foreign Data | Inventors | Address | Fees | Post Info | Pre Grant Pub Appln Info | Contents | Petition Info Search Another: Application# [Search or Patent# [Search PCT/ / or PG PUBS # [Search Search Attorney Docket # [Search Bar Code # [Search

PALM INTRANET

Day: Friday Date: 9/24/2004 Time: 09:30:07

Application Number Information

Application Number: 08/456343 Assignments

Examiner Number: 67774 / MEIER, STEPHEN

Filing Date: 06/01/1995

Group Art Unit: 2815

Effective Date: 06/01/1995

Class/Subclass: 257/644.000

Application Received: 06/01/1995

Lost Case: NO

Patent Number:

Interference Number:

Issue Date: 00/00/0000

Unmatched Petition: NO

Date of Abandonment: 02/10/1998

Attorney Docket Number: 93-C-32C1

L&R Code: Secrecy Code:1

Secrecy Order: NO

Status: 161 / ABANDONED -- FAILURE TO RESPOND TO AN OFFICE ACTION

Third Level Review: NO

Status Date: 05/08/1998

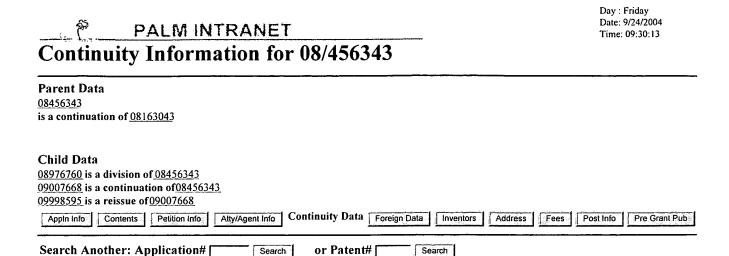
Confirmation Number: 9716

Oral Hearing: NO

Title of Invention: ENHANCED PLANARIZATION TECHNIQUE FOR AN INTEGRATED CIRCUIT

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Appln Info Contents Petition Info Atty/Agent Info Continuity Data Foreign Data Inventors Address Fees Post Info Pre Grant Pub Search Another: Application# Search Or Patent# Search							
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	Attorney Dock	et #	Search				
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PCT/ /

Bar Code # [

Attorney Docket # [

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PALM INTRANET

Day: Friday Date: 9/24/2004 Time: 09:30:17

Application Number Information

Application Number: 08/163043 Assignments

Examiner Number: 64774 / DANG, THI

Filing Date: 12/06/1993

Group Art Unit: 1109

Effective Date: 12/06/1993

Class/Subclass: 999/228.000

Application Received: 12/06/1993

Lost Case: NO

Patent Number: <u>5435888</u>

Interference Number:

Issue Date: 07/25/1995

Unmatched Petition: NO

Date of Abandonment: 00/00/0000 Attorney Docket Number: SGS011 L&R Code: Secrecy Code:1

Secrecy Order: NO

Status: 150 /PATENTED CASE

Third Level Review: NO

Status Date: 07/13/1995

Confirmation Number: 4871

Oral Hearing: NO

Title of Invention: ENHANCED PLANARIZATION TECHNIQUE FOR AN INTEGRATED CIRCUIT

Bar Code	PALM Location	Location Date	Charge to Loc	Charge to Name	Employee Name	Location			
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Appln Info Contents Petition Info Atty/Agent Info Continuity Data Foreign Data Inventors Address Fees Post Info Pre Grant Pub									
Search Another: Application# Search or Patent# Search									
PCT / Search or PG PUBS # Search									
Attorney Docket # Search									
Bar Code # Search									

To go back use Back button on your browser toolbar.

Day : Friday

Date: 9/24/2004 PALM INTRANET Time: 09:30:24 Continuity Information for 08/163043 **Parent Data** No Parent Data **Child Data** 08411495 is a division of 08163043 08456343 is a continuation of 08163043 $\underline{08679946}$ is a continuation of $\underline{08411495}$ <u>08898737</u> is a reissue of <u>08163043</u> 08976760 is a division of 08456343 09007668 is a continuation of 08456343 09998595 is a reissue of 09007668 Continuity Data Foreign Data Contents Petition Info Appln Info Atty/Agent Info Inventors Address Fees Post Info Pre Grant Pub Search Another: Application# [Search or Patent# [Search PCT / [/ [or PG PUBS#[Search Search Attorney Docket # [Search Bar Code # □ Search

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Litigation involving patent 5,986,330

Click on the docket number to view the docket. Click on the above patent number to view the patent.

Docket ☐ Case Heading ☐ Date Filed ☐ Date Retrvd ☐

There are no cases involving this patent number.

Source: <u>Legal</u> > <u>Area of Law - By Topic</u> > <u>Patent Law</u> > <u>Patents</u> > <u>U.S. Patents</u> > <u>Utility Patents</u> []

Terms: patno=5986330 (Edit Search)

007668 (00) 5986330 November 16, 1999

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

5986330

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Link to Claims Section

November 16, 1999

Enhanced planarization technique for an integrated circuit

REISSUE: November 16, 2001 - Reissue Application filed Ex. Gp.: 2822; Re. S.N. 09/998,595 (O.G. October 8, 2002)

INVENTOR: Kalnitsky, Alex, Grenoble, FR; Lin, Yih-Shung, Plano, TX

APPL-NO: 007668 (00)

FILED-DATE: January 15, 1998

GRANTED-DATE: November 16, 1999

ASSIGNEE-AT-ISSUE: STMicroelectronics, Inc., Carrollton, TX

ASSIGNEE-AFTER-ISSUE: November 2, 1999 - CHANGE OF NAME (SEE DOCUMENT FOR DETAILS)., STMICROELECTRONICS, INC. M/S 2346 1310 ELECTRONICS DRIVE CARROLLTON TEXAS 750 06, Reel and Frame Number: 010340/0863

LEGAL-REP: Galanthay, Theodore E.; Jorgenson, Lisa K.

PUB-TYPE: November 16, 1999 - Utility Patent having no previously published pre-grant publication (A)

PUB-COUNTRY: United States (US)

REL-DATA:

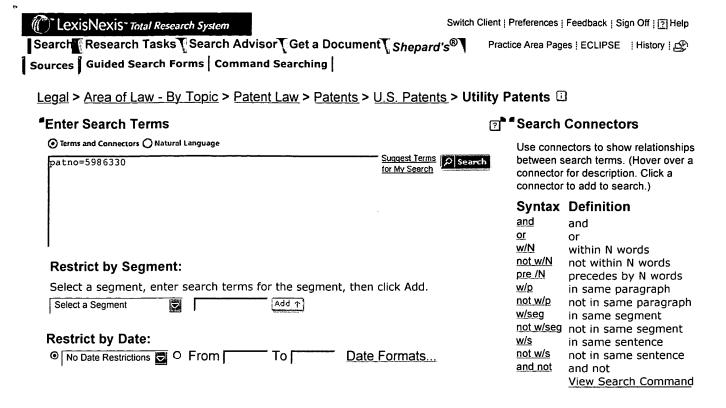
Addition of Ser. No. 5435888

Addition of Ser. No. 456343, June 1, 1995 Addition of Ser. No. 163043, December 6, 1993

US-MAIN-CL: 257#644

US-ADDL-CL: 257#634, 257#647

CL: 257



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Query/Command : file pluspat

Selected file: PLUSPAT

Search statement 1

Query/Command: us5986330/pn

** SS 1: Results 1

Search statement 2

Query/Command : prt fu legalall max

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        US5986330 A 19991116 [US5986330]
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PA
         (A) ST MICROELECTRONICS INC (US)
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(A) KALNITSKY ALEX (FR); LIN YIH-SHUNG (US)
US766898 19980115 [1998US-0007668]
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                   US163043 19931206 [1993US-0163043]
        Cont. of
        Continuation of: US5435888
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        H01L-021/316B2B
        H01L-021/768
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        ORIGINAL (O): 257644000; CROSS-REFERENCE (X): 257E21243
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        Corresponding document
        US4253907; US4354896; US4384938; US4654112; US4657628; US4660278;
CT
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US4233907; US4334996, US4364938; US44755476; US4792534; US4801350; US4676867; US4707218; US4721548; US4755476; US4792534; US4801350; US4801560; US4824767; US4894351; US4912061; US4962414; US4986878; US5003062; US5063176; US5068711; US5110763; US5117273; US5158910; US5166088; US5244841; US5250472; US5266525; US5310720; US5320983; US5435888; US5534731; EP2083948 A; EP0111706; EP0265638; EP327412; EP0185787; EP0491408; DE410244; JP60-58635; JP61-26240; JP61-232646; JP62-106645; JP63-293946; JP4092453; GB2167901 A; GB8901236

IBM Technical Disclosure Bulletin, vol. 30, No. 8, p. 252, Jan. 1988.

IBM Technical Disclosure Bulletin, vol. 29, No. 3, p. 1328, Aug. 1986.

"A New Technology for Oxide Contact and Via Etch", by Pete Singer, Semiconductor International, p. 36 (1993).

Handbook on Semiconductors, (ed. C. Holson), vol. 4, p. 208 (1981).

"Etching Applications and Trends of Dry Etching", Ephrath et al., Semiconductor Technology and Computer Systems, Ch. 2, p. 26. 1991.

VLSI Electronics Microstructures Science, vol. 8, ed. Norman Einspruch, p. 298 (1984).

"Plasma Etch Anisotrophy", C.B. Zarowin, J. Electrochem. Soc., Solid-State Science and Technology, p. 1144 (1983).

"A Super Self-Aligned Source/Drain MOSFET," Lau et al., IEDM, p. 358 (1987).

"A Margin-Free Contact Process Using an AI303 Etch-Stop Layer for High Density Devices", Fukase et al., IEDM, p. 837 (1992).

Research Disclosure No. 282, Oct. 1987, Havant GB p. 608, "Spin on Glass Insulator Enhancement".

"Etching--Applications and Trends of Dry Etching", by L.M. Ephrath and G.S. Mathad, Handbook of Advanced Technology and Computer Systems at 27 ff (1988).

"Reactive Ion Etching", by B. Gorowitz and R. Saia, $8\ VLSI$ Electronics, $297ff\ (1984)$.

Patent Abstracts of Japan, vol. 15, No. 348 (E-1107) Sep. 4, 1991 & JP-A-31 33 131 (Mitsubishi Electric Corp.) Jun. 6, 1991.

"Three *Low Dt* Options for Planarizing the Premetal Dielectric on an Advanced Double Poly BicMOS Process", by W. Dauksher, M. Miller, and C. Tracey, J. Electrochem. Soc., vol. 139, No. 2, p. 532 (1992).

"The Effect of Plasma Cure Temperature on Spin-On Glass", by H. Namatsu and K. Minegishi, J. Electrochem. Soc., vol. 140, No. 4, p. 140 (1991).

"Hot-Carrier Aging of the MOS Transistor in the Presence of Spin-On Glass as the Interlevel Dielectric", by N. Lifschitz and G. Smolinsky, IEEE Electron Device Letters, vol. 12, No. 3, p. 140 (1991).

"Advantages of Using Spin on Glass Layer in Interconnection Dielectric Planarization", Microelectronic Engineering, vol. 5 (1986).

"Doped Silicon Oxide Deposition by Atmospheric Pressure and Low Temperature Chemical Vapor Deposition Using Tetraethoxysilane and Ozone", Fujino et al., J. Electrochem. Society, vol. 138, No. 10, p. 3019 Oct. 1991.

"Polysilicon Planarization Using Spin-On Glass", S. Ramaswami and A. Nagy, J. Electrochem. Soc., vol. 139, No. 2, p. 591 (1992).

- STG (A) United States patent
- AB A method for planarizing integrated circuit topographies, wherein, after a first layer of spin-on glass is deposited, a layer of low-temperature oxide is deposited before a second layer of spin-on glass.
- 1 / 1 LGST ©EPO
- PN US5986330 A 19991116 [US5986330]
- **AP** US766898 19980115 [1998US-0007668]

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19991102 US/AS-A
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       EFFECTIVE DATE: 19980519
       CHANGE OF NAME; ASSIGNOR: SGS-THOMSON MICROELECTRONICS,
       INC.; REEL/FRAME: 010340/0863
       20021008 US/RF-A
       REISSUE APPLICATION FILED
       EFFECTIVE DATE: 20011116
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       2004-25
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PN -
       5,986,330 A 19991116 [US5986330]
PA -
       STMicroelectronics Inc
PT -
       E (Electrical)
       20011116 REISSUE REQUESTED
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       ISSUE DATE OF O.G.: 20021008
       REISSUE REQUEST NUMBER: 09/998595
       EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 2822
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UP -
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1 Patent Groups
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      PLUSPAT - @QUESTEL-ORBIT
1 / 7
PN -
       DE69425636 D1 20000928 [DE69425636]
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       (D1) Planarisierungstechnik für eine integrierte Schaltung
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AP -

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DE69425636 19941117 [1994DE-6025636] US16304393 19931206 [1993US-0163043] **UP** - 2000-35

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PN - DE69425636 D1 20000928 [DE69425636]DE69425636 T2 20010125

[DE69425636]

AP - DE69425636 19941117 [1994DE-6025636]

ACTE- 20010913 DE/8364-A [+]

NO OPPOSITION DURING TERM OF OPPOSITION

UP - 2003-22

2 / 2 LEGALI - ©EPO

PN - EP0657925 A1 19950614 [EP-657925]EP0657925 B1 20000823 [EP-657925]

AP - EP94308498 19941117 [1994EP-0308498]

ACTE- 19950614 EP/AK-A [+]

DESIGNATED CONTRACTING STATES:

DE FR GB IT

19960207 EP/17P-A [+]

REQUEST FOR EXAMINATION FILED

EFFECTIVE DATE: 19951214

19970205 EP/17Q-A [+]

FIRST EXAMINATION REPORT

EFFECTIVE DATE: 19961218

19990224 EP/RAP3-A

APPLICANT CHANGE OF NAME (CORRECTION)

OWNER: STMICROELECTRONICS, INC.

19990804 EP/RTI1-A

TITLE (CORRECTION)

PLANARIZATION TECHNIQUE FOR AN INTEGRATED CIRCUIT

20000823 EP/AK-A [+]

DESIGNATED CONTRACTING STATES:

DE FR GB IT

20000928 EP/REF-A

CORRESPONDS TO:

(DE 69425636 20000928 [DE69425636])

20001103 EP/ITF-A [+]

IT: TRANSLATION FOR A EP PATENT FILED

OWNER: STUDIO TORTA S.R.L.

20001215 EP/ET-A [+]

FR: TRANSLATION FILED

20010808 EP/26N-A [+]

NO OPPOSITION FILED

20020101 EP/REG-A; GB/IF02 [+]

GB: EUROPEAN PATENT IN FORCE AS OF 2002-01-01

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UP - 2003-22

2 / 7 PLUSPAT - @QUESTEL-ORBIT - image

PN - EP0657925 A1 19950614 [EP-657925]

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      (A1) Technique de phanarisation améliorée pour un circuit intégré.
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        20010808 EP/26N-A [+]
        NO OPPOSITION FILED
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        GB: EUROPEAN PATENT IN FORCE AS OF 2002-01-01
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AP - JP30186894 19941206 [1994JP-0301868]

PR - US16304393 19931206 [1993US-0163043]
4 / 7
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PN - US5435888 A 19950725 [US5435888]
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PAO - SGS-Thomson Microelectronics, Inc., Carrollton TX [US]
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        EFFECTIVE DATE: 19931202
        19931206 US/AS02-A
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        ASSIGNMENT OF ASSIGNOR'S INTEREST
        OWNER: LIN, YIH-SHUNG; EFFECTIVE DATE: 19931130
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UP - 2003-22 PLUSPAT - @QUESTEL-ORBIT - image US5633534 A 19970527 [US5633534] PN -(A) United States patent STG -TI -(A) Integrated circuit with enhanced planarization PA -(A) SGS THOMSON MICROELECTRONICS (US) PA0 -SGS-Thomson Microelectronics, Inc., Carrollton TX [US] (A) KALNITSKY ALEX (FR); LIN YIH-SHUNG IC -(A) H01L-023/48 H01L-023/52 H01L-029/40 AP -US67994696 19960715 [1996US-0679946] US16304393 19931206 [1993US-0163043] PR -US41149595 19950328 [1995US-0411495] US67994696 19960715 [1996US-0679946] EC ~ H01L-021/3105B2B H01L-021/316B2B H01L-021/768 H01L-021/768B4 ORIGINAL (O): 257752000; CROSS-REFERENCE (X): 257E21245 PCL -257E21279 257E21575 257E21580 257644000 DT -Basic 6 / 7 PLUSPAT - @QUESTEL-ORBIT - image PN - US5986330 A 19991116 [US5986330] (A) United States patent (A) Enhanced planarization technique for an integrated circuit (A) ST MICROELECTRONICS INC (US) PA0 -STMicroelectronics, Inc., Carrollton TX [US] (A) KALNITSKY ALEX (FR); LIN YIH-SHUNG (US) IN -IC -(A) H01L-023/58 US766898 19980115 [1998US-0007668] US766898 19980115 [1998US-0007668] AP -PR -US45634395 19950601 [1995US-0456343] US16304393 19931206 [1993US-0163043] EC -H01L-021/3105B H01L-021/3105B2B H01L-021/316B2B H01L-021/768 H01L-021/768B4 ORIGINAL (O): 257644000; CROSS-REFERENCE (X): 257E21243 PCL -257E21245 257E21279 257E21575 257E21580 257634000 257647000 DT -Corresponding document 1 / 1 LEGALI - ©EPO PN -US5986330 A 19991116 [US5986330] AP -US766898 19980115 [1998US-0007668] 19991102 US/AS-A ACTE-ASSIGNMENT OWNER: STMICROELECTRONICS, INC. M/S 2346 1310 ELECTRONICS; EFFECTIVE DATE: 19980519 CHANGE OF NAME; ASSIGNOR: SGS-THOMSON MICROELECTRONICS, INC.; REEL/FRAME: 010340/0863 20021008 US/RF-A

REISSUE APPLICATION FILED EFFECTIVE DATE: 20011116

2004-25

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7 / 7 PLUSPAT - @QUESTEL-ORBIT - image
PN - US5837613 A 19981117 [US5837613]
STG - (A) United States patent
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PA - (A) ST MICROELECTRONICS INC (US)
PA0 -
       STMicroelectronics, Inc., Carrollton TX [US]
IN -
       (A) KALNITSKY ALEX (FR); LIN YIH-SHUNG (US)
IC -
       (A) H01L-021/00
AP -
       US97676097 19971124 [1997US-0976760]
US97676097 19971124 [1997US-0976760]
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        US16304393 19931206 [1993US-0163043]
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       H01L-021/3105B2B
        H01L-021/316B2B
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        H01L-021/768B4
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DT - Basic
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PN -
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AP -
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       19980928 US/AS01-A
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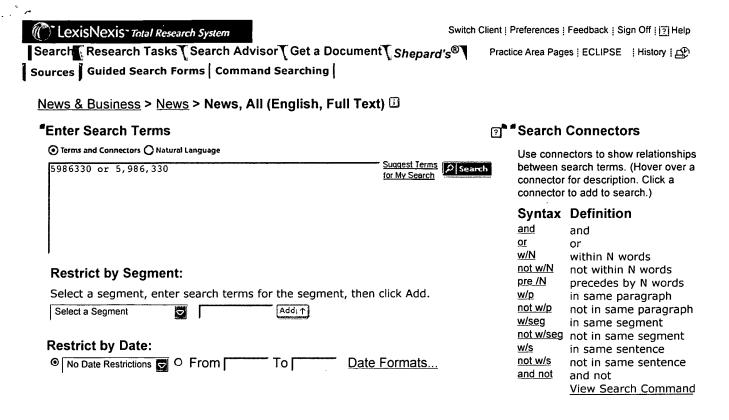
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